



IDEM's Surface Water Quality Assessment Program

Fish Tissue Contaminant Monitoring Program

Program Objective

The objective of this program is to identify and provide information on chemical contaminants that may be accumulating in the tissues of fish. This type of monitoring helps to locate sources of contaminants whose concentrations in other environmental media (such as water) are often too low to be easily found with routine sampling and laboratory procedures. The fish tissue contaminant monitoring program provides the majority of data used for Indiana's Fish Consumption Advisories (FCA) for the protection of consumers of sport caught fish. In addition this information can be used for wildlife health risk assessments for fish-eating birds and mammals; and to provide information needed to develop models to assess changes in Indiana waters that affect aquatic life and human health.

Program Participants

The Biological Studies Section of the Assessment Branch, Office of Water Quality, operates this program. Contract laboratory services are utilized for contaminant levels determination. Decisions on fish consumption advisories are made through an Interagency Workgroup consisting of participants from IDEM, the Indiana State Department of Health (ISDH), and the Indiana Department of Natural Resources (IDNR). Fish consumption advisories are issued through the ISDH.

Program Description

Media:	Fish from the surface water of rivers, streams, reservoirs and lakes
Study Area:	Statewide
Site Selection Type:	Historically, a targeted site selection based on need for information, follow-up monitoring, or regular basin rotation visits.
Sampling Sites:	Continued targeting of sites on rivers, lakes, and reservoirs; emerging problem areas of the state; and water bodies never before monitored; regular revisit to 20 designated CORE river locations and near shore Lake Michigan; based on a probabilistic draw in wadable streams (see Fact Sheet <i>Watershed Monitoring Program</i>).
	Sampling Frequency: 5 year basin rotations for entire State (see : http://www.in.gov/idem/water/assessbr/016surfwaterqualmonstrat.pdf)
Data Collected:	Chemical contaminant levels in fish flesh

As a member of the Ohio River Valley Water Sanitation Commission (ORSANCO), Indiana contributes to ORSANCO activities related to monitoring fish tissue contaminants in the Ohio River. As a Great Lakes State, Indiana also participates in the annual Great Lakes Fish (tissue) Monitoring Survey in southern Lake Michigan sponsored by the Great Lakes National Program Office (GLNPO) U.S. Environmental Protection Agency (U.S. EPA). This is the 21st year of Indiana's participation in this program. In alternating years coho and chinook tissue samples are collected by IDNR for tissue contaminant analysis. A lab selected by GLNPO analyzes these samples. The results are reported by GLNPO to the participating states.

Program Products

- < *Indiana's Fish Consumption Advisory.*
- < Use support designations of Indiana waters for Section 305(b) Report
- < Assessments for Section 303(d) List of Impaired Waters in Indiana.
- < Periodic technical reports on contaminant levels and trends.
- < Support of the Environmental Performance Partnership Agreement (EnPPA) between Indiana and U.S. EPA.
- < Support of Indiana's Remedial Action Plan for the Northwest Indiana Area of Concern.
- < Support of the Lake Michigan Lakewide Area Management Plan.

Technical Notes

Contaminants analyzed for includes a number of metals (23) including cadmium, lead, and mercury; organochlorine pesticides (27) such as DDT, chlordane, and dieldrin; total polychlorinated biphenyls (PCBs). Additional contaminants such as brominated diphenyl ethers (BDEs), polycyclic aromatic hydrocarbons (PAHs) (18), semivolatile (47), volatile (33) compounds, congeners of PCBs and dioxins, and tributyl tin may be analyzed for when industrial, municipal, and/or other source pollution is suspected.

Contact Information

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<p>IDEM Information: (317) 232-8603 or 800-451-6027 800-743-3333(TDD) toll-free for Indiana residents www.IN.gov/idem/water/</p> <p>Report Environmental Emergencies: (888) 233-7745</p> <p>Confidential Technical Assistance: (800) 988-7901</p> <p>Pollution Complaint: www.IN.gov/idem/pollutioncomplaints/</p> <p>Questions and Comments: www.IN.gov/idem/contact/questions.html</p>	<p><u>For More Information on IDEM's Office of Water Quality...</u></p> <p>Assessment Branch (Surface water quality monitoring: rivers and streams, lakes, water quality standards) Shadeland Office, Indianapolis (317) 308-3173</p> <p>Compliance Branch (Compliance and inspections, data and information services, wastewater certification and continuing education) Indiana Government Center North, Indianapolis (317) 233-2545</p> <p>Drinking Water Branch (Public water supply supervision and ground water protection) Shadeland Office, Indianapolis (317) 308-3308</p> <p>Permitting Branch (Facilities Construction & Engineering Support, Industrial & municipal permits, modeling, and wet weather) Indiana Government Center North, Indianapolis (317) 232-8760</p> <p>Watershed Planning Branch (Rules development, wetlands, TMDL, watershed management) Indiana Government Center North, Indianapolis (317) 233-8488</p>
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